

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	"736739".ap.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:58
L2	608	564/163.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L3	317	562/504.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L4	1388	514/563.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L5	9	L3 and L4	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L6	0	L5 and L2	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L7	0	L3 and L2	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L8	158	549/83.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L9	550	549/72.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L10	1	l8 and l9	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L11	379	549/71.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 13:01
L12	3	l11 and l8	US-PGPUB; USPAT	OR	ON	2007/03/05 13:01
S1	6	"736711".ap.	US-PGPUB; USPAT	OR	ON	2006/10/10 10:21
S2	102	562/603.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03
S3	0	562/604.6.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:01
S4	0	562/504.6.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:02
S5	312	562/504.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:02
S6	126	562/622.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:02
S7	1	S2 and S5	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03
S8	0	S2 and S6	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03
S9	1250	514/563.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03

EAST Search History

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S13	1	"7071355".pn.	US-PGPUB; USPAT	OR	ON	2006/10/09 06:57
S14	0	"736739".pn.	US-PGPUB; USPAT	OR	ON	2006/10/09 06:57
S15	3	"736739".ap.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:44
S16	0	"7071355".ap.	US-PGPUB; USPAT	OR	ON	2006/10/10 10:21
S17	1	"7071355".pn.	US-PGPUB; USPAT	OR	ON	2006/10/10 10:21

10736, 739B Yong Chu 3-5-2007

clear of arts except
ODP overcome by TD.

\$%^STN;HighlightOn=;HighlightOff=;

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssptaylc1626

PASSWORD :

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 33 Feb 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 34 Feb 26 CAS Registry Number crossover limit increased from 10,000
to 300,000 in multiple databases

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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FILE 'REGISTRY' ENTERED AT 11:01:04 ON 05 MAR 2007
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STRUCTURE FILE UPDATES: 4 MAR 2007 HIGHEST RN 924728-01-8
DICTIONARY FILE UPDATES: 4 MAR 2007 HIGHEST RN 924728-01-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

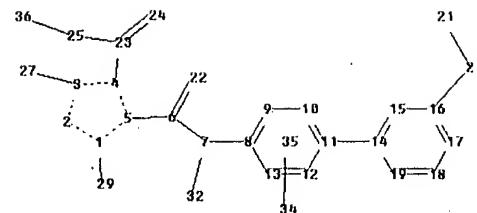
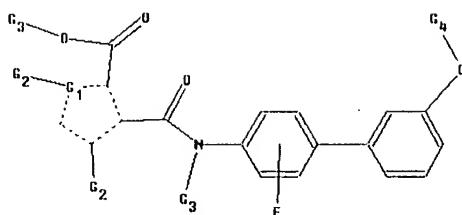
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>
Uploading C:\Documents and Settings\ychu\Desktop\Case\10736739\10736739B.str



chain nodes :

6 7 20 21 22 23 24 25 27 29 32 34 36

ring nodes :

1 2 3 4 5 8 9 10 11 12 13 14 15 16 17 18 19

chain bonds :

1-29 3-27 4-23 5-6 6-7 6-22 7-8 7-32 11-14 16-20 20-21 23-24 23-25 25-36

ring bonds :

1-2 1-5 2-3 3-4 4-5 8-9 8-13 9-10 10-11 11-12 12-13 14-15 14-19 15-16
16-17 17-18 18-19

exact/norm bonds :

1-2 1-5 1-29 2-3 3-4 3-27 4-5 4-23 5-6 6-7 6-22 7-8 7-32 11-14 16-20
20-21 23-24 23-25 25-36

normalized bonds :

8-9 8-13 9-10 10-11 11-12 12-13 14-15 14-19 15-16 16-17 17-18 18-19

G1:C,S

G2:H,OH,CH3

G3:H,CH3

G4:CH3,CH2,CF3

Match level :

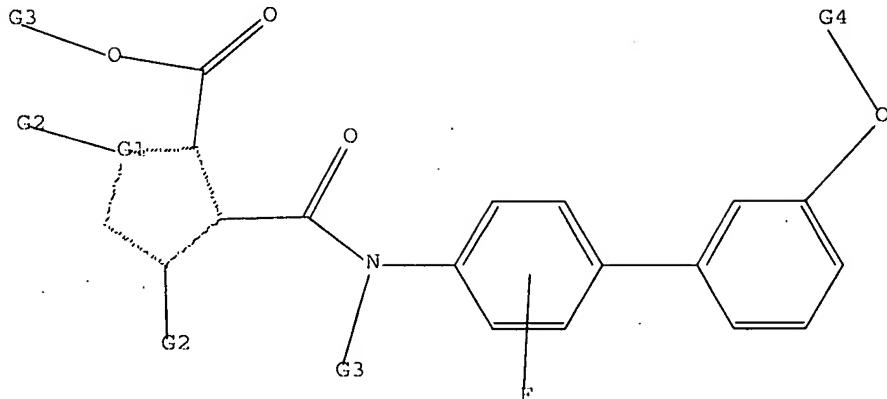
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11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 27:CLASS 29:CLASS 32:CLASS 34:CLASS
35:Atom 36:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 C, S

G2 H, OH, Me

G3 H, Me

G4 Me, CH2, CF3

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 11:01:29 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED

2 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2 TO 124

PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 11:01:36 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 90 TO ITERATE

100.0% PROCESSED

90 ITERATIONS

27 ANSWERS

SEARCH TIME: 00.00.01

L3 27 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY

SESSION

172.10

175.04

FILE 'CAPLUS' ENTERED AT 11:01:41 ON 05 MAR 2007
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FILE LAST UPDATED: 4 Mar 2007 (20070304/ED)

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=> s 13
L4 6 L3

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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:87597 CAPLUS Full-text
DOCUMENT NUMBER: 144:304503
TITLE: Dual Binding Mode of a Novel Series of DHODH
Inhibitors
AUTHOR(S): Baumgartner, Roland; Walloschek, Markus; Kralik,
Martin; Gotschlich, Astrid; Tasler, Stefan; Mies, Jan;
Leban, Johann
CORPORATE SOURCE: 4SC AG, Martinsried, 82152, Germany
SOURCE: Journal of Medicinal Chemistry (2006), 49(4),
1239-1247
CODEN: JMCMAR; ISSN: 0022-2623

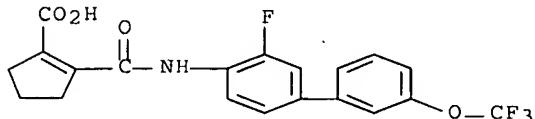
late

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

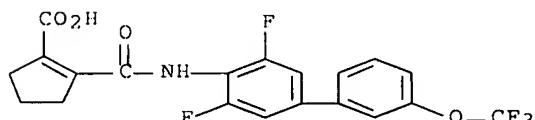
AB Human dihydroorotate dehydrogenase (DHODH) represents an important target for the treatment of hyperproliferative and inflammatory diseases. In the cell DHODH catalyzes the rate-limiting step of the de novo pyrimidine biosynthesis. DHODH inhibition results in beneficial immunosuppressant and antiproliferative effects in diseases such as rheumatoid arthritis. Here, we present high-resoln. X-ray structures of human DHODH in complex with a novel class of low mol. wt. compds. that inhibit the enzyme in the nanomolar range. Some compds. showed an interesting dual binding mode within the same cocrystal strongly depending on the nature of chem. substitution. Measured in vitro activity data correlated with the prevailing mode of binding and explained the obsd. structure-activity relationship. Addnl., the X-ray data confirmed the competitive nature of the inhibitors toward the putative ubiquinone binding site and will guide structure-based design and synthesis of mols. with higher activity.

IT 669063-49-4 669063-57-4 669063-59-6
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic

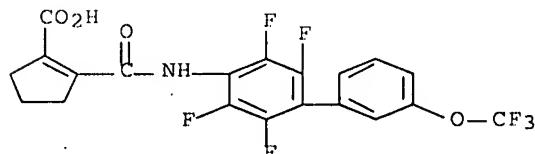
use); BIOL (Biological study); USES (Uses)
(dual binding mode of novel series of DHODH inhibitors)
RN 669063-49-4 CAPLUS
CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



RN 669063-57-4 CAPLUS
CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



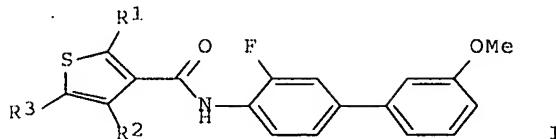
RN 669063-59-6 CAPLUS
CN 1-Cyclopentene-1-carboxylic acid, 2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1251585 CAPLUS Full-text
DOCUMENT NUMBER: 144:150196
TITLE: Biphenyl-4-ylcarbamoyl thiophenecarboxylic acids as potent DHODH inhibitors
AUTHOR(S): Leban, Johann; Kralik, Martin; Mies, Jan; Baumgartner, Roland; Gassen, Michael; Tasler, Stefan
CORPORATE SOURCE: 4SC AG, Martinsried, 82152, Germany
SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(2), 267-270
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:150196
GI



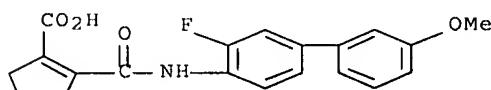
AB: A previously discovered dihydroorotate dehydrogenase (DHODH) inhibitor series was further improved by replacing the cyclopentene ring by arom. heterocycles. Different isomers of these compds., e.g. I (R1 = R2 = HO2C, R3 = H; R1 = R3 = HO2C, R2 = H; R1 = H, R2 = R3 = HO2C), were prep'd. by the directed ortho-metallation procedure. The compds. are more active than the corresponding cyclopentene analogs and show potent effects on periferal blood mononuclear cell (PBMC) proliferation.

IT 717824-30-1

RL: PAC (Pharmacological activity); BIOL (Biological study)
(prepn. and biol. evaluation of biphenylcarbamoyl thiophene- and furancarboxylic acids as dihydroorotate dehydrogenase inhibitors and periferal blood mononuclear cell antiproliferative agents)

RN 717824-30-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl- (9CI) (CA INDEX NAME)



late

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1024942 CAPLUS Full-text
DOCUMENT NUMBER: 143:398883
TITLE: SAR, species specificity, and cellular activity of cyclopentene dicarboxylic acid amides as DHODH inhibitors
AUTHOR(S): Leban, Johann; Kralik, Martin; Mies, Jan; Gassen, Michael; Tentschert, Karin; Baumgartner, Roland
CORPORATE SOURCE: 4SC AG, Martinsried, 82152, Germany
SOURCE: Bioorganic & Medicinal Chemistry Letters (2005), 15(21), 4854-4857
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:398883

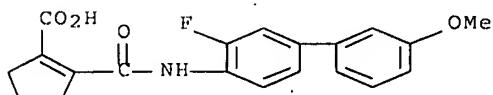
AB Novel DHODH inhibitors were developed based on a previously described series by introduction of heteroatoms into the cyclopentene ring and hydroxyl groups attached to it. Also, the hydrophobic biphenyl side chain was replaced with benzyloxy Ph groups. Activities on human, rat, and mouse enzymes indicate a species specificity of these inhibitors.

IT 717824-30-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(cyclopentene dicarboxylic acid amides as DHODH inhibitors)

RN 717824-30-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



IT 669063-57-4P 669063-59-6P 717824-35-6P

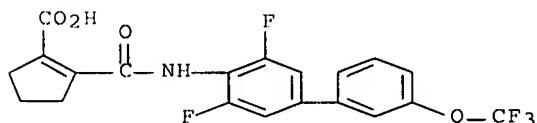
717824-36-7P 867287-88-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cyclopentene dicarboxylic acid amides as DHODH inhibitors)

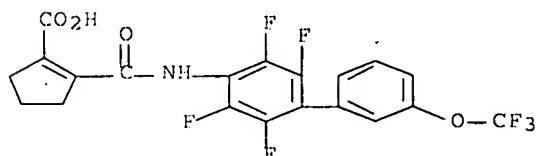
RN 669063-57-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[3,5-difluoro-3'-(trifluoromethoxy) [1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



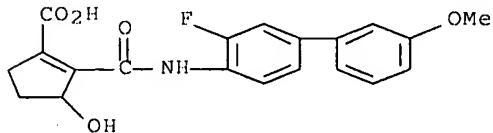
RN 669063-59-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy) [1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



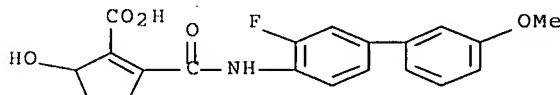
RN 717824-35-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



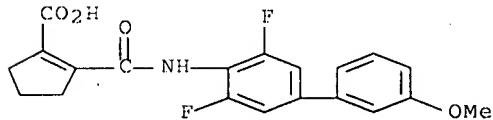
RN 717824-36-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



RN 867287-88-5 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3,5-difluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:550931 CAPLUS Full-text

DOCUMENT NUMBER: 141:99739

TITLE: Dihydroorotate dehydrogenase (DHODH) inhibitors and method for their identification

INVENTOR(S): Leban, Johann; Kramer, Bernd; Baumgartner, Roland; Aulinger-Fuchs, Katharina; Tasler, Stefan

PATENT ASSIGNEE(S): 4SC A.-G., Germany

SOURCE: PCT Int. Appl., 357 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

WO 2004056747	A1	20040708	WO 2003-EP14435	20031217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2003300530	A1	20040714	AU 2003-300530	20031217
US 2004176458	A1	20040909	US 2003-736711	20031217
US 7071355	B2	20060704		
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PRIORITY APPLN. INFO.:				
		DE 2002-10260799	A	20021223
		DE 2002-10260800	A	20021223
		EP 2003-28137	A	20031205
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		US 2003-526992P	P	20031205
		WO 2003-EP14435	W	20031217

OTHER SOURCE(S): MARPAT 141:99739

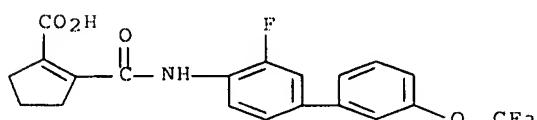
AB The present invention relates to compds. contg. non-arom. ring systems or heteroarom. ring systems, which are capable of binding to the ubiquinone binding site of DHODH. Methods for identification of such compds. are also disclosed.

IT 669063-49-4D, complexes with dihydroorotate dehydrogenase
 669063-57-4D, complexes with dihydroorotate dehydrogenase
 669063-59-6D, complexes with dihydroorotate dehydrogenase
 717824-30-1D, complexes with dihydroorotate dehydrogenase
 717824-33-4D, complexes with dihydroorotate dehydrogenase
 717824-34-5D, complexes with dihydroorotate dehydrogenase
 717824-35-6D, complexes with dihydroorotate dehydrogenase
 717824-36-7D, complexes with dihydroorotate dehydrogenase
 717824-53-8 717824-54-9 717824-57-2
 717824-60-7 717824-64-1 717824-86-7
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RL: PRP (Properties)
 (dihydroorotate dehydrogenase inhibitors and inhibitor identification method)

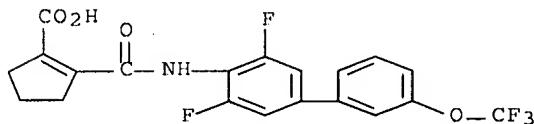
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CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



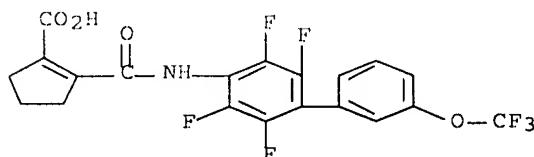
RN 669063-57-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



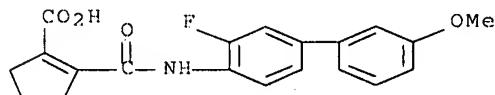
RN 669063-59-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



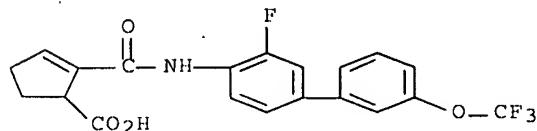
RN 717824-30-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



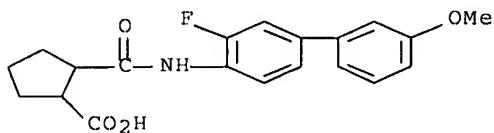
RN 717824-33-4 CAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



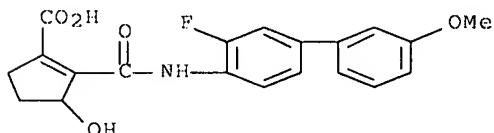
RN 717824-34-5 CAPLUS

CN Cyclopentanecarboxylic acid, 2-[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



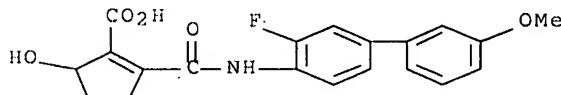
RN 717824-35-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



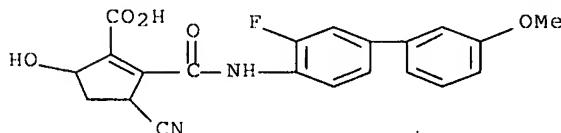
RN 717824-36-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



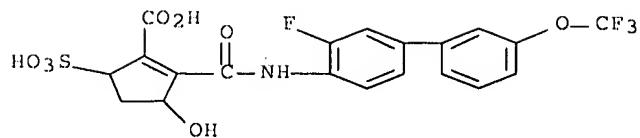
RN 717824-53-8 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



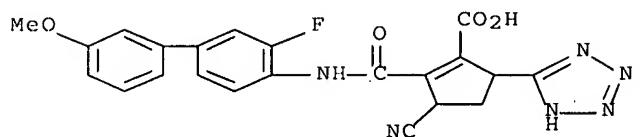
RN 717824-54-9 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy-5-sulfo- (9CI) (CA INDEX NAME)



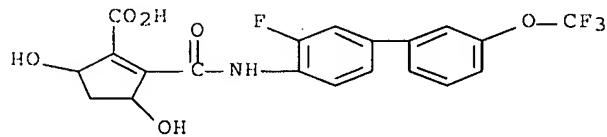
RN 717824-57-2 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-(1H-tetrazol-5-yl)- (9CI) (CA INDEX NAME)



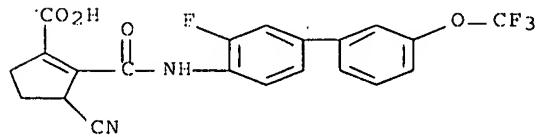
RN 717824-60-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]-3,5-dihydroxy- (9CI) (CA INDEX NAME)



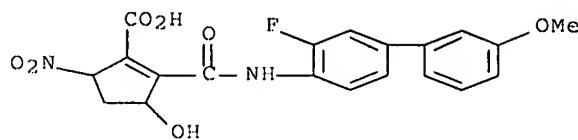
RN 717824-64-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)

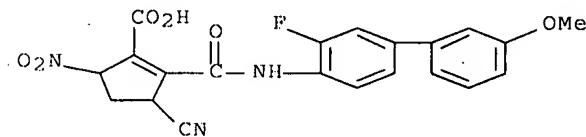


RN 717824-86-7 CAPLUS

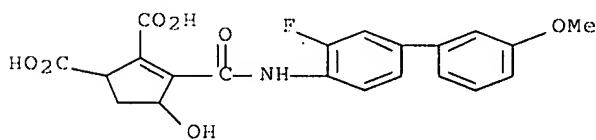
CN 1-Cyclopentene-1-carboxylic acid, 2-[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy-5-nitro- (9CI) (CA INDEX NAME)



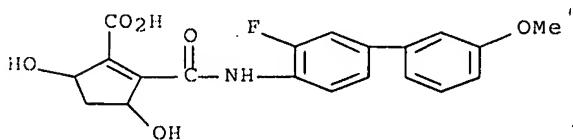
RN 717825-01-9 CAPLUS
 CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-nitro- (9CI) (CA INDEX NAME)



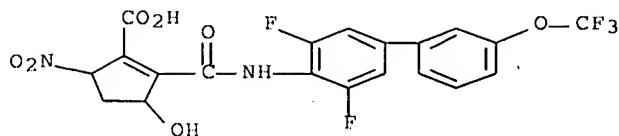
RN 717825-16-6 CAPLUS
 CN 2-Cyclopentene-1,2-dicarboxylic acid, 3-[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-4-hydroxy- (9CI) (CA INDEX NAME)



RN 717825-40-6 CAPLUS
 CN 1-Cyclopentene-1-carboxylic acid, 2-[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3,5-dihydroxy- (9CI) (CA INDEX NAME)



RN 717825-46-2 CAPLUS
 CN 1-Cyclopentene-1-carboxylic acid, 2-[(3,5-difluoro-3'-trifluoromethoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy-5-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

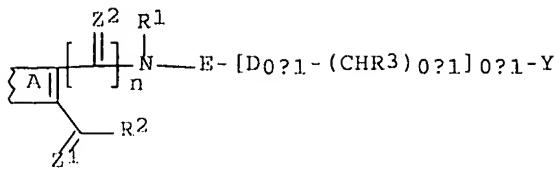
L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:550930 CAPLUS Full-text
 DOCUMENT NUMBER: 141:106198
 TITLE: A preparation of cycloalkenedicarboxylic acid derivatives, useful as dihydroorotate dehydrogenase (DHODH) inhibitors
 INVENTOR(S): Leban, Johann; Kralik, Martin
 PATENT ASSIGNEE(S): 4SC A.-G., Germany
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056746	A1	20040708	WO 2003-EP14434	20031217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2509138	A1	20040708	CA 2003-2509138	20031217
AU 2003299316	A1	20040714	AU 2003-299316	20031217
US 2004176458	A1	20040909	US 2003-736711	20031217
US 7071355	B2	20060704		
US 2004192758	A1	20040930	US 2003-736742	20031217
EP 1581477	A1	20051005	EP 2003-799487	20031217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003017731	A	20051122	BR 2003-17731	20031217
CN 1732163	A	20060208	CN 2003-80107354	20031217
CN 1732147	A	20060208	CN 2003-80107355	20031217
JP 2006511564	T	20060406	JP 2004-561332	20031217
US 2007027193	A1	20070201	US 2004-736739	20041110
ZA 2005004387	A	20060222	ZA 2005-4387	20050530
IN 2005MN00816	A	20051111	IN 2005-MN816	20050722
PRIORITY APPLN. INFO.:			DE 2002-10260800	A 20021223
			US 2002-435258P	P 20021223
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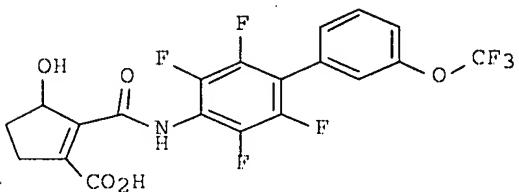
Current
App.

OTHER SOURCE(S) :
GI

MARPAT 141:106198



I



II

AB The invention relates to a prepn. of cycloalkenedicarboxylic acid derivs. of formula I [wherein: A is a non-arom. ring contg. 4 to 8 carbon atoms, wherein the ring system comprises at least one double bond and wherein one or more of the carbon atoms in the ring can be replaced by S, O, N, or S(O), etc.; D is O, S, SO₂, or CH₂, etc.; Z₁ and Z₂ are independently selected from O, S, or NH, etc. ; R₁ is H or alkyl; R₂ is H, OH, O-(cyclo)alkyl, or NH₂, etc.; R₃ is H, (cyclo)alkyl, aryl, alkoxy, halogen, or O-aryl, etc.; E is an alkyl or cycloalkyl group or a (mono/poly)cyclic (un)substituted ring system; Y is H, halogen, haloalkyl, haloalkyloxy, alkyl, cycloalkyl, a monocyclic or polycyclic (un)substituted ring system; n is 0 or 1], useful as antiinflammatory, immunomodulatory and antiproliferatory agents. The obtained compds. were screened in inhibition assay for dihydroorotate dehydrogenase (DHODH) activity. For instance, cyclopentene carboxylic acid deriv. II showed IC₅₀ value (human DHODH) of < 1.μ.M.

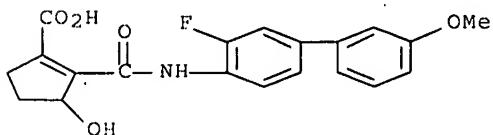
IT 717824-35-6P 717824-36-7P 719301-48-1P
719301-49-2P 719301-50-5P 719301-52-7P
719301-53-8P 719301-54-9P 719301-55-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

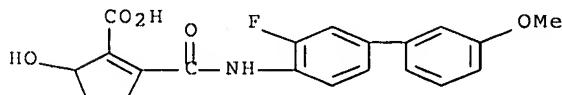
(prepn. of cycloalkenedicarboxylic acid derivs., useful as antiinflammatory, immunomodulatory and antiproliferatory agents)

RN 717824-35-6 CAPLUS

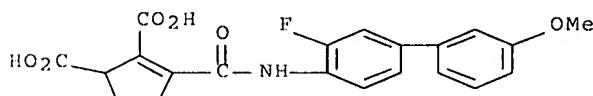
CN 1-Cyclopentene-1-carboxylic acid, 2-[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



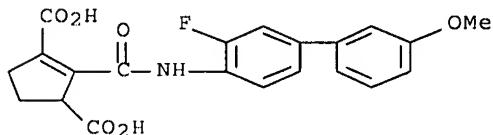
RN 717824-36-7 CAPLUS
CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



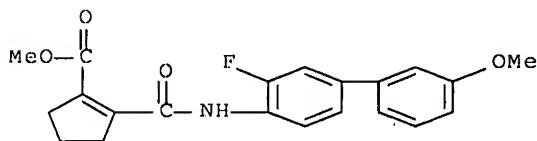
RN 719301-48-1 CAPLUS
CN 2-Cyclopentene-1,2-dicarboxylic acid, 3-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



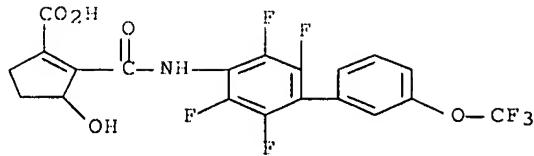
RN 719301-49-2 CAPLUS
CN 1-Cyclopentene-1,3-dicarboxylic acid, 2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



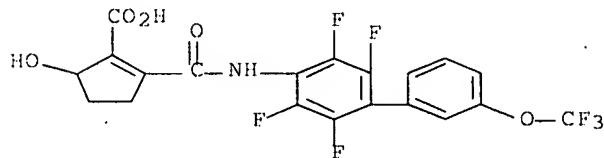
RN 719301-50-5 CAPLUS
CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



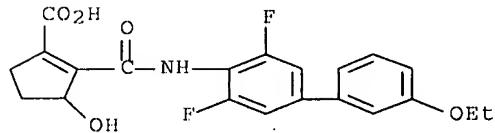
RN 719301-52-7 CAPLUS
CN 1-Cyclopentene-1-carboxylic acid, 3-hydroxy-2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



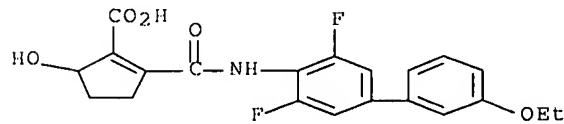
RN 719301-53-8 CAPLUS
 CN 1-Cyclopentene-1-carboxylic acid, 5-hydroxy-2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



RN 719301-54-9 CAPLUS
 CN 1-Cyclopentene-1-carboxylic acid, 2-[[3'-ethoxy-3,5-difluoro[1,1'-biphenyl]-4-yl]amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 719301-55-0 CAPLUS
 CN 1-Cyclopentene-1-carboxylic acid, 2-[[3'-ethoxy-3,5-difluoro[1,1'-biphenyl]-4-yl]amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:981447 CAPLUS Full-text

Inte.

DOCUMENT NUMBER: 140:246103
TITLE: Discovery of a novel series of DHODH inhibitors by a docking procedure and QSAR refinement
AUTHOR(S): Leban, Johann; Saeb, Wael; Garcia, Gabriel; Baumgartner, Roland; Kramer, Bernd
CORPORATE SOURCE: Martinsried, 82152, Germany
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(1), 55-58
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:246103

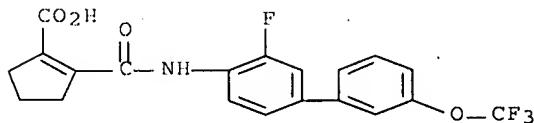
AB A novel series of DHODH (dihydroorotate dehydrogenase) inhibitors was developed based on a lead which was obtained by a docking procedure and a medicinal chem. exploration. The activity of the initial lead was improved by a QSAR method to yield low nanomolar inhibitors.

IT 669063-49-4P 669063-57-4P 669063-59-6P
669063-68-7P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(discovery of a novel series of dihydroorotate dehydrogenase inhibitors by a docking procedure and QSAR refinement)

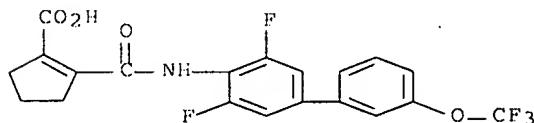
RN 669063-49-4 CAPPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



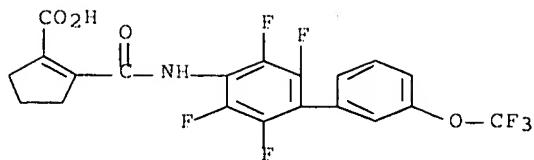
RN 669063-57-4 CAPPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



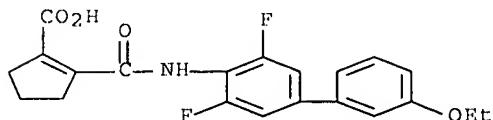
RN 669063-59-6 CAPPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



RN 669063-68-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3'-ethoxy-3,5-difluoro[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Executing the logoff script...

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

32.09 207.13

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION

CA SUBSCRIBER PRICE

-4.68 -4.68

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